



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/584,975

06/30/2006

Klaus Steinhauser

ZAHFRI P868US

2444

20210 7590 08/14/2009
DAVIS & BUJOLD, P.L.L.C.
112 PLEASANT STREET
CONCORD, NH 03301

EXAMINER

KNIGHT, DEREK DOUGLAS

ART UNIT

PAPER NUMBER

3655

MAIL DATE

DELIVERY MODE

08/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,975	Applicant(s) STEINHAUSER ET AL.	
	Examiner DEREK D. KNIGHT	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/22/2009 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 21 and 22 rejected under 35 U.S.C. 102(b) as being anticipated by **POPP et al. (US 6,375,597)**.

Regarding **claim 14**, POPP discloses a method of increasing readiness of a crossover gear shift in an automatic transmission, the method comprising the steps of: attaining at least one of a snatch operation of the disengaging switching element (see Fig. 5C) and an increase of the transmission rotational speed gradient (shown in Fig. 5B) by providing a crossover gear shift switching command to the transmission (shown in Fig. 5A); actuating a motor fueling (starts at time t3, see Fig. 5B) from the transmission immediately after the crossover gear shift command (at time t1) upon one

Art Unit: 3655

of a set transmission rotational speed (C, B or D is Fig. B) and a set motor torque (described in col. 5, lines 58 - 67), wherein engagement and disengagement of transmission clutches (lines in Fig. 5C and 5D) are effected by an increase in fuel to the engine (Fig. 5B shows three possibilities for the motor fueling) or a resultant increase in the engine output torque to the transmission during the shifting operation; and maintaining the motor fueling during the crossover.

Regarding **claim 21**, POPP discloses the step of reducing pressure, in the disengaging switching element during the motor fueling such that the opening of the disengaging switching element is accelerated (shown in Fig. 5C).

Regarding **claim 22**, POPP discloses the step of increasing pressure, in the engaging switching element during the motor fueling (shown in Fig. 5D).

Response to Arguments

Applicant's arguments filed 6/16/2009 have been fully considered but they are not persuasive. Examiner would like to clarify that at no time was it stated that the amendments to the claims "more explicitly and thoroughly distinguishes the claims over the Popp et al. '597 reference" as Applicant has stated in their remarks.

Applicant argues that in the Popp reference, the clutch engagement and disengagement operations are not effected by an increase in fuel to the engine or a resulting increase in engine input torque to the transmission during the shifting operation. Examiner disagrees. It is clear from the charts show in Figs. 5A-5D that the engagement and disengagement operations (Figs. 5C and 5D) are effected by an increase in fuel to the engine (Fig. 5B). There are three different and distinct engine

Art Unit: 3655

fuel maps shown in the chart in Fig. 5B, they are AC, AB, and AB. Those three engine maps have corresponding pressure maps for the disengaging and engaging members shown in the charts in Figs. 5C and 5D. The disengaging maps are EHJ, EFG, and EKL respectively. The engaging maps are NPQ, NOQ and NQ. Because the engagement and disengagement pressure profiles of the clutches differ depending on the engine fueling map, it is clear that the Popp reference discloses the limitations of the amended claim, specifically the engagement and disengagement of transmission clutches are effected by an increase in fuel to the engine during the shifting operation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK D. KNIGHT whose telephone number is (571)272-7951. The examiner can normally be reached on Mon - Friday, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roger L Pang/
Primary Examiner, Art Unit 3655
/D. D. K./
Examiner, Art Unit 3655